0069435

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

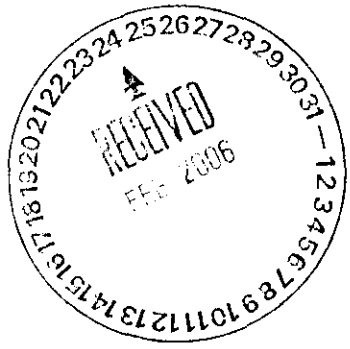
SDG 06I-0771-02 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 333 Bldg

Cover Page



Report Identification Number: 06I-0771-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 /R33300 J451
Payroll#: 0636267

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
15 Feb 2006	J11596	06I06366	NMAM 7300M	G061P016	G WIPE
15 Feb 2006	J11595	06I06367	NMAM 7300M	G061P016	G WIPE
15 Feb 2006	J115Y0	06I06368	NMAM 7300M	G061P016	G WIPE
15 Feb 2006	J115Y1	06I06369	NMAM 7300M	G061P016	G WIPE
15 Feb 2006	J115X1	06I06370	NMAM 7300M	G061P016	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Lisa M. Reid
Title: Chemist
Date: February 24, 2006

Case Narrative Page

Report Identification Number:	06I-0771-02
Subcontract Number:	0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist:	Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number:	DCHM
SAF#:	RC-001 /R33300 J451
Payroll#:	0636267

General Set Information: There are 5 samples in set 06I-0771-02 and 8 samples in set 06I-0772-01 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.02 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS result was within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (µg/sample) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination (µg/L)

B = Concentration factor from sample preparation

$$= \frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$$

C = Dilution performed at time of analysis

Example Calculation: (1 µg/L) x (0.025 L/sample) x (1) = 0.025 µg/sample

Miscellaneous Comments: None

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Report Page

Report Identification Number: 06I-0771-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 /R33300 J451
Payroll#: 0636267

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J11596	06I06366	22 Feb 2006	<0.02	U	<0.07	U	<2.	U
J11595	06I06367	22 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115Y0	06I06368	22 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115Y1	06I06369	22 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115X1	06I06370	22 Feb 2006	<0.02	U	<0.07	U	<2.	U
		Limit of Detection (LOD)	0.02		0.07		2.	
		Required Detection Limit (RDL)						

U - Parameter not detected above LOD.
J - Parameter between LOD and RDL.

QC Summary Page

Report Identification Number: 06I-0771-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 /R33300 J451
Payroll#: 0636267

Batch ID: G061P016

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241673-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241673-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-241673-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-241673-1	LCS	Beryllium	µg/sample	11.3	NA	10.0	113.	NA
QC-241673-1	LCS	Cadmium	µg/sample	31.3	NA	30.0	104.	NA
QC-241673-1	LCS	Lead	µg/sample	103.	NA	100.	103.	NA
QD-241673-1	LCSD	Beryllium	µg/sample	11.6	11.3	10.0	116.	2.90
QD-241673-1	LCSD	Cadmium	µg/sample	31.9	31.3	30.0	106.	2.00
QD-241673-1	LCSD	Lead	µg/sample	105.	103.	100.	105.	2.14

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

DATA CHEM LABORATORIES

COC Page

06I-0771-01,02

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Yetta D. Jones
Company Contact: Denise A. Pitts and Henry W. Raby
Telephone No. 531-1229
Project Coordinator: Joan H. Kessner
Data Turnaround: 24 HOUR
Payroll #: 73513
Sampling Location: 300 Area 333 Building
SPECIAL INSTRUCTIONS All relevant COAs must be provided: R33300 J451
SAF No. RC-001
Type of Sample: Air & Wipes
ANALYSIS METHOD (SPECIFIC): NIOSH 7300
Method of Shipment: FED EX
Shipped To: Data Chem Salt Lake City
Wipe Sample Media: Ghost ☒ Yes ☐ No Other ______
Bill of Lading/Air Bill No. 8544 9435 4830
POSSIBLE SAMPLE HAZARD/REMARKS: Be, Cd, Pb
Special Handling and/or Storage: NA
MATRIX: A - AIR; WI - WIPE; X - OTHER
Preservation (i.e., cooling required, etc.)

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ___ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
					No	No	No	No	No	No	No	No	na
J113X7	A	2-15-06	NA	Blank	na	X	X	06I0260				X	na
J113X8	A	2-15-06	NA	Blank	na	X	X	↓	61			X	na
J113X1	A	2-15-06	699L	personal	na	X	X		62	Hj		X	na
J113X3	A	2-15-06	603L	personal	na	X	X		2-15-06 63			X	na
J113X4	A	2-15-06	605L	personal	na	X	X		64			X	na
J113X6	A	2-15-06	60L	personal	na	X	X	↓	65			X	na
J11596	WI	2-15-06	NA	Blank	06I0366			X	na	X	X		
J11595	WI	2-15-06	NA	Blank		Hj	67	X	na	X	X	Hj	
J115Y0	WI	2-15-06	100cm²	10% SKC#44	2-15-06		68	X	na	X	X	2-15-06	
J115Y1	WI	2-15-06	100cm²	10% MSA Mesh		↓	69	X	na	X	X		

WCH-SH-202 (08/29/2005)

Page 1 of 4

Enter on line below the first Sample Number from Page One:

J113X7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
[signature] Yeta D. Jones	2-15-06 1515	3746 Building, Rm 16, locked cabinet	2-15-06 1515
locked cabinet Bldg 3746 Rm #16 [signature] Goldie Malhon	02/21/06 / 1440	RZ Steffler [signature]	2-21-06 / 1440
RZ Steffler [signature]	WCH 2-21-06 / 1600	Fed Ex	
Fed Ex		[signature]	2/22/06 0900
[signature] 3JW		X	

LABORATORY SECTION	Received By	Title	DATE / TIME
	[signature]		2/22/06 0900

REVIEWED BY: ____________________ DATE: __________

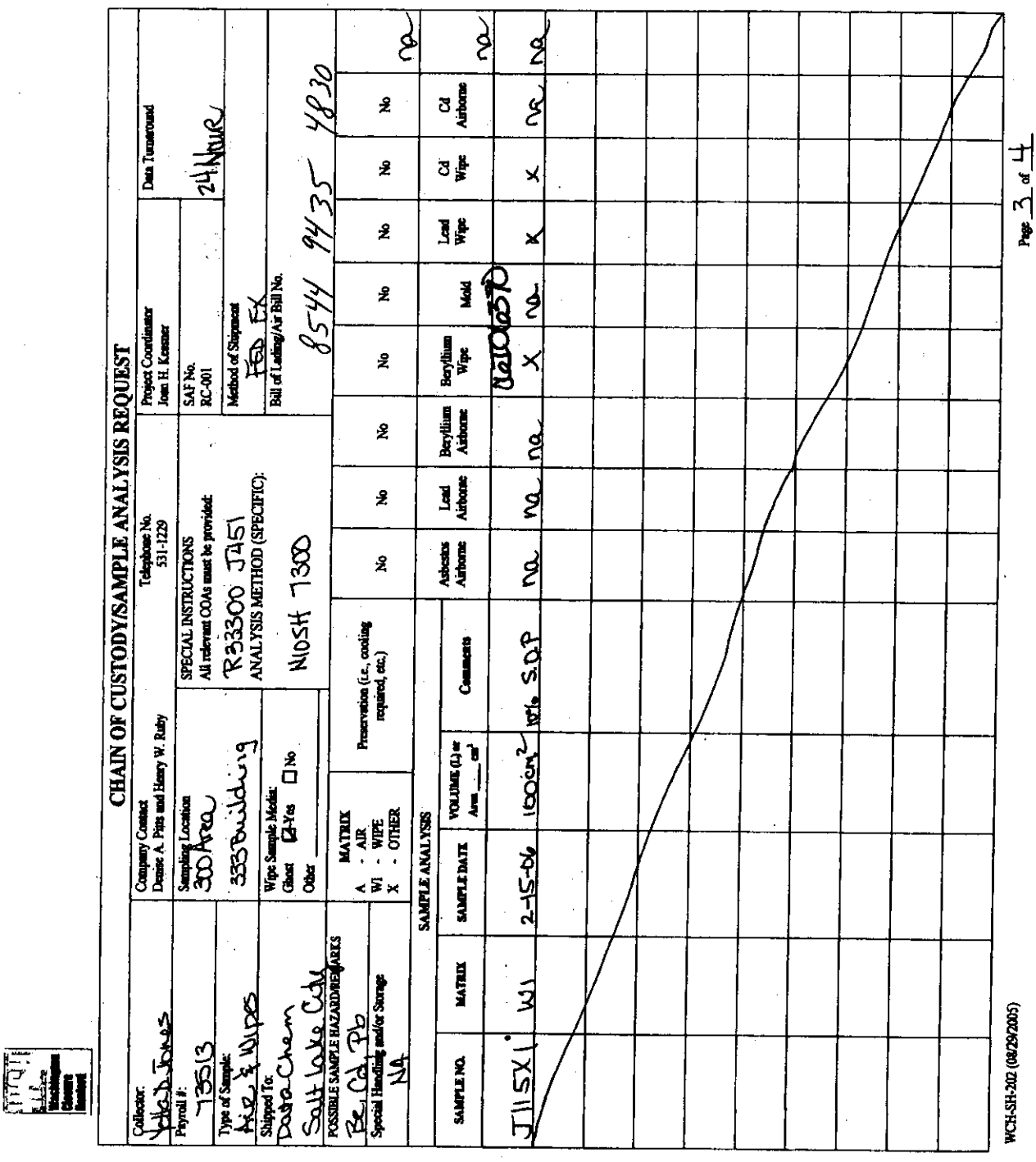
PRINT/SIGN NAME

WCH-SH-202 (08/24/2005)

Page 2 of 4

DATA CHEM LABORATORIES

COC Page



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Ted Jones
Company Contact: Denise A. Pitts and Henry W. Ruby
Telephone No.: 531-1229
Project Coordinator: John H. Kessner
Data Turnaround: 24 Hour
Payroll #: 73513
Sampling Location: 300 Area
SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R33300 J451
SAF No.: RC-001
Method of Shipment: Fed Ex
Type of Sample: Air & Wipes
Shipped To: DataChem Salt Lake City
Wipe Sample Media: Ghost ☑ Yes ☐ No Other
ANALYSIS METHOD (SPECIFIC): NIOSH 7300
Bill of Lading/Air Bill No.: 8544 9435 4830
POSSIBLE SAMPLE HAZARDS/REMARKS: Be, Cd, Pb
Special Handling and/or Storage: NA
MATRIX: A - AIR, WI - WIPE, X - OTHER
Preservation (i.e., cooling required, etc.)

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ___ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
					No	No	No	No	No	No	No	No
J115X1	WI	2-15-06	100cm²	10% SOP	na	na	na	X	na	X	X	na

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WCH-SH-202 (08/29/2005)

DATA CHEM LABORATORIES

COC Page

Enter on line below the first Sample Number from Page One:

J113X7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Sample	DATE/TIME	Received By/Sample	DATE/TIME
[signature] Vettes Jones	2-15-06 1515	3146 Building, Rm 16, locked cabinet	2-15-06 1515
locked cabinet 3146 bldg Rm#16 [signature] Gabie McMahan	02-21-06 / 1440	RZ Steffler R.J. Steffler	2-21-06 / 1440
RZ Steffler R.J. Steffler	WCH 2-21-06 / 1600	Fed Ex	
Fed Ex		[signature]	2/22/06 0900
Metals 3W			

LABORATORY SECTION — Received By: [signature] — Title: — DATE / TIME: 2/22/06 0900

REVIEWED BY: ______________________ DATE: ______________

PRINT/SIGN NAME

WCH-SH-202 (08/29/2005)

Page 4 of 4

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Ytta D. Jones	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner	Data Turnaround: 24 HOUR
Payroll #: 73513	Sampling Location: 300 Area, 333 Building	SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R33300 J451	SAF No.: RC-001	
Type of Sample: Air & wipes	Wipe Sample Media: Ghost [X] Yes [ ] No; Other	ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: FED EX	
Shipped To: Data Chem, Salt Lake City			Bill of Lading/Air Bill No.: 8544 9435 4830	
POSSIBLE SAMPLE HAZARD/REMARKS: Be, Cd, Pb	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)		
Special Handling and/or Storage: NA				

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
					No	No	No	No	No	No	No	No	na
J113X7	A	2-15-06	NA	Blank	na	X	X					X	na
J113X8	A	2-15-06	NA	Blank	na	X	X					X	na
J113X1	A	2-15-06	699L	personal	na	X	X			ydj		X	na
J113X3	A	2-15-06	603L	personal	na	X	X		2-15-06			X	na
J113X4	A	2-15-06	605L	personal	na	X	X					X	na
J113X6	A	2-15-06	60L	personal	na	X	X					X	na
J11596	WI	2-15-06	NA	Blank				X	na	X	X		
J11595	WI	2-15-06	NA	Blank		ydj		X	na	X	X		ydj
J115Y0	WI	2-15-06	100cm²	10% SKC #44	2-15-06			X	na	X	X	2-15-06	
J115Y1	WI	2-15-06	100cm²	10% MSA Mesh				X	na	X	X		

Enter on line below the first Sample Number from Page One:

J113X7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
Yetta D. Jones locked cabinet Bldg 3746 Rm #16	2-15-06 1515	3746 Building, Rm 16, locked cabinet	2-15-06 1515
Goldie Mallon	02/21/06 1440	RZ Steffler R.J. Steffler	2-21-06 1440
RZ Steffler R.J. Steffler	WCH 2-21-06 1600	Fed Ex	

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Kelly D Jones	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Keasner
Payroll #: 73513	Sampling Location: 300 Area, 333 Building	SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R33300 J451	SAF No.: RC-001
Type of Sample: Air & Wipes	Wipe Sample Media: Ghost ☑ Yes ☐ No; Other	ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: FED EX
Shipped To: Data Chem Salt Lake City			Bill of Lading/Air Bill No.: 8544 9435 4830
POSSIBLE SAMPLE HAZARD/REMARKS: Be, Cd, Pb	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)	Data Turnaround: 24 Hour
Special Handling and/or Storage: NA			

SAMPLE ANALYSIS														
					No	No	No	No	No	No	No	No		
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ___ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne		
													na	na
J115X1	WI	2-15-06	100cm²	10% S.D.P	na	na	na	X	na	X	X	na	na	

COPY

FIELD SAMPLE COPY

Enter on line below the first Sample Number from Page One:

J113X7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored	DATE / TIME	Received By/Stored	DATE / TIME
Jeffrey D. Jones	2-15-06 1515	3746 Building, Rm 16, locked cabinet	2-15-06 1515
Locked cabinet 3746 Bldg Rm#16			
Gabe McMillan Gabe McMillan	02.21.06 / 1440	RZ Steffler R.J. Steffler	2-21-06 / 1440
RZ Steffler R.J. Steffler	WCH 2-21-06 / 1600	Fed Ex	

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME